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Claims

1. A compound of the formula I

wherein

- o R¹ is selected from:
 - (i) linear or branched C₁-C₆ alkyl;
 - (ii) C_1 - C_6 alkoxy;

R^2 is selected from

- 15 (i) hydrogen;
 - (ii) linear or branched C_1 - C_6 alkyl;
 - (iii) C₁-C₆ alkoxy;

R^3 and R^4 is each and independently selected from

- 20 (i) hydrogen;
 - (ii) linear or branched C₁-C₆ alkyl;

(iii)
$$\frac{\xi}{}$$
 (CH₂)_m wherein m = 1-3;

(iv)
$$\stackrel{\stackrel{\bullet}{\downarrow}}{\uparrow}$$
 CH₂ ; and (v) $\stackrel{\stackrel{\bullet}{\downarrow}}{\uparrow}$ CH₂—CH=CH₂;

 R^5 , R^6 , R^7 , R^8 and R^9 is each and independently selected from

(i) hydrogen;

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- (ii) halogen, where "halogen" encompasses chloro, fluoro, bromo and iodo; and
- (iii) linear or branched C₁-C₆ alkyl; and

n is an integer of from 1 to 5;

as well as pharmaceutically and pharmacologically acceptable salts thereof.

A compound of formula I according to claim 1, wherein

 R^1 is a linear C_1 - C_6 alkyl;

 R^2 is a linear C_1 - C_6 alkyl or hydrogen;

 ${\bf R}^{\bf 3}$ and ${\bf R}^{\bf 4}$ is each and independently selected from a straight C_1 - C_6 alkyl or hydrogen;

 R^5 , R^6 , R^7 , R^8 and R^9 is each and independently selected from

- (i) hydrogen;
- (ii) halogen, where "halogen" encompasses chloro, fluoro, bromo and iodo;
- (iii) linear or branched C1-C6 alkyl; and
- n is an integer of from 1 to 5.

3. A compound according to claim 1, wherein

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R<sup>1</sup> is CH<sub>3</sub>;
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 R^2 is hydrogen or CH₃;

 R^3 and R^4 are both hydrogen; and

 R^5 , R^6 , R^7 , R^8 and R^9 are all hydrogen; and

n is 4.

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4. A compound according to claim 1, which compound is selected from anyone of

H-Dmt-D-Arg-Phe-Lys-NH₂;

H-Dmt-D-Arg-Phe-Orn-NH₂;

H-Dmt-D-Arg-Phe-A₂bu-NH₂;

H-Mmt-D-Arg-Phe-Lys-NH₂;

H-Dmt-D-Arg-Phe(p-F)-Lys-NH2; and

Dmt(NMe)-D-Arg-Phe-Lys-NH₂.

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- 5. A compound according to any one of the previous claims, in form of its hydrochloride salt, acetate salt or trifluoroacetate salt.
- 6. A compound according to any of claims 1-5 for use in therapy.

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- 7. A compound according to claim 6, wherein the therapy is pain management.
- 8. A compound according to claim 7, wherein the pain is labor pain.

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- 9. Use of a compound according to formula I of claim 1, for the manufacture of a medicament for use in the treatment of pain.
- 10. Use according to claim 9, wherein the pain is labor pain.
- 11. A pharmaceutical composition comprising a compound of the formula I according to claim 1 as an active ingredient, in admixture with one or more pharmacologically and pharmaceutically acceptable carriers.
- 12. A pharmaceutical composition according to claim 11, suitable for administration intrathecally, epidurally, intramuscularly, and intravenously.
 - 13. A pharmaceutical composition according to claim 12, wherein the intravenous administration is by infusion.
 - 14. A process for the preparation of a compound of the formula I according to claim 1 by means of solid-phase synthesis, wherein the coupling step in which a protected amino acid is added to the growing peptide chain is performed in an inert solvent using a coupling reagent.
 - 15. A method for the treatment of a subject suffering from pain, whereby an effective amount of a compound of the formula I of claim 1, is administered to a patient in need of pain relief.
 - 16. A method for treatment according to claim 15, wherein the pain is labor pain.